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Claims

1. Method for detecting a leakage in a pipeline (4) or similar conduit characterized by the use of an umbilical flexible tube (1) laid within and along said pipeline (4), the displacement of a solution column (2) within said umbilical flexible tube (1), the measurement of the pressure (P) at the front (3) of said solution column (2) and the localization of said front (3) from the said measured pressure.
2. Method according to claim 1 furthermore comprising the measurement of the temperature at the front (3) of said solution column (2).
3. Method according to claim 1 or 2 wherein the solution (2) is a saline solution and wherein the measurement of the pressure (P) is obtained via the measurement of the electrical resistance or capacity.
4. System for detecting and localizing a leakage in a pipeline (4) or similar conduit using the method of claim 1, 2 or 3 characterized by the fact that it comprises :
 - An umbilical flexible tube (1) adapted to be laid within a pipe (4) ;
 - Pumping means (7) adapted for moving a solution (2) within said umbilical flexible tube (1);
 - Pressure measuring means (C₁, C₆, 6, CVC) adapted for determining the pressure (P) at the front of a solution (2) moving within said flexible tube(1);
 - Localization means adapted for determining the position of a solution front (3) from the measured pressure (P) of said front (3).
5. System according to claim 4 furthermore comprising temperature measuring means adapted for determining the temperature at the front (3) of a solution (2) moving within said flexible tube (1).

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- 5 6. System according to claim 4 or 5 furthermore comprising capacitive sensors (C_1 , C_2) adapted for measuring the electrical capacity of a solution (2) moving within said flexible tube (1).